What is claimed is:

1. A digital multiple reception apparatus comprising:

first and second reception antennas;

reception level control means, connected to said first and said second reception antennas, for gradually increasing one of reception levels in said first and said second reception antennas during a predetermined time interval and for gradually decreasing another of the reception levels during the predetermined time interval;

measuring means for measuring strength of a received electric field during the predetermined time interval to produce a measured result; and

selecting means for selecting, in response to said measured result, one of said first and said second reception antennas.

2. A digital multiple reception apparatus as claimed in claim 1, wherein said reception level control means comprises:

first attenuating means for attenuating the reception level in said first reception antenna; and

second attenuating means for attenuating the reception level in said second reception antenna,

said reception level control means gradually decreasing an attenuating amount in said first attenuating means and gradually increasing an attenuating amount in said second attenuating means.

3. A digital multiple reception apparatus as claimed in claim 2, wherein said first and said second attenuating means are composed of a T-type attenuator including first through third variable attenuating elements having first through third attenuating amounts which vary in accordance with first through third control voltages supplied thereto.

4. A digital multiple reception apparatus as claimed in claim 3, wherein said first through said third variable attenuating elements comprise

first through third pin diodes having anode electrodes supplied with said first through said third control voltages.

5. A digital multiple reception apparatus as claimed in claim 3, wherein further comprises:

first through third memories for storing data corresponding to said first through said third control voltages; and

first through third analog-to-analog converting sections for converting data read from said first through third memories into first through third analog signals, respectively, said first through said third analog signals being supplied to said first through said third variable attenuating elements as said first through said third control voltages, respectively.

6. A digital multiple reception apparatus as claimed in claim 5, wherein said first through said third variable attenuating elements comprise first through third pin diodes having anode electrodes supplied with said first through said third control voltages.

7. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means measures a first accumulated amount of the strength of the received electric field in a first half within said predetermined time interval and a second accumulated amount of the strength of the received electric field in a latter half within said predetermined time interval,

said selecting means selecting one of said first and said second reception antennas in accordance with a comparison result between said first and said second accumulated amounts.

8. A digital multiple reception apparatus as claimed in claim 7, wherein said measuring means decreases a frequency of measurement when a current comparison result is identical with to a previous comparison result.

9. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means decreases a frequency of measurement

when said digital multiple reception apparatus is put into a reception wait state.

10. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means decreases a frequency of measurement when said digital multiple reception apparatus is located outside an area where an electric wave to be received reaches.

11. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means increases and decreases a frequency of measurement in accordance with a moving speed of said digital multiple reception apparatus.

12. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means decreases a frequency of measurement when a battery serving as a power supply of said digital multiple reception apparatus has a power remaining amount which is not more than a predetermined value.

13. A digital multiple reception apparatus as claimed in claim 1, wherein said measuring means increases and decreases a frequency of measurement in accordance with a value of strength of a received electric field.

14. A digital multiple reception apparatus as claimed in claim 7, wherein said measuring means shortens the predetermined time interval when a difference between said first and said second accumulated values is larger than a predetermined value.

15. A method of receiving in a digital multiple reception apparatus comprising first and second reception antennas, said method comprising:

a reception level control step of gradually increasing one of reception levels in said first and said second reception antennas during a predetermined time interval and of gradually decreasing another of the reception levels during the predetermined time interval;

a measuring step of measuring strength of a received electric field during the predetermined time interval to produce a measured result; and

a selecting step of selecting, in response to said measured result, one of said first and said second reception antennas.

16. A method as claimed in claim 15, wherein said reception level control step uses first and second attenuators for attenuating the reception levels in said first and said second reception antennas to gradually decrease a first attenuating amount in said first attenuator and to gradually increase a second attenuating amount in said second attenuator.

17. A method as claimed in claim 15, wherein said measuring step measures a first accumulated amount of the strength of the received electric field in a first half within said predetermined time interval and a second accumulated amount of the strength of the received electric field in a latter half within said predetermined time interval,

said selecting step selecting one of said first and said second reception antennas in accordance with a comparison result between said first and said second accumulated amounts.

18. A method as claimed in claim 17, wherein said measuring step decreases a frequency of measurement when a current comparison result is identical with to a previous comparison result.

19. A method as claimed in claim 15, wherein said measuring step decreases a frequency of measurement when said digital multiple reception apparatus is put into a reception wait state.

20. A method as claimed in claim 15, wherein said measuring step decreases a frequency of measurement when said digital multiple reception apparatus is located outside an area where an electric wave to be received reaches.

21. A method as claimed in claim 15, wherein said measuring step increases and decreases a frequency of measurement in accordance with a

moving speed of said digital multiple reception apparatus.

22. A method as claimed in claim 15, wherein said measuring step decreases a frequency of measurement when a battery serving as a power supply of said digital multiple reception apparatus has a power remaining amount which is not more than a predetermined value.

23. A method as claimed in claim 15, wherein said measuring step increases and decreases a frequency of measurement in accordance with a value of strength of a received electric field.

24. A method as claimed in claim 17, wherein said measuring step shortens the predetermined time interval when a difference between said first and said second accumulated values is larger than a predetermined value.